Polymer Degradation and Stability **33** (1991) 444–446

CONTENTS OF VOLUME 33

Number 1

The Effects of Temperature and Humidity on the Chemical Structure of Urea Formaldehyde Foam 1
V. M. BROWN, D. R. CRUMP & D. GARDINER (UK)

Photo-oxidation of Poly(vinyl chloride): Part 2—A Comparative Study of the Carbonylated Products in Photo-chemical and Thermal Oxidations . . . 17
S. GAUMET & J.-L. GARDETTE (France)

A Generalized Model for Enzymic Depolymerization Processes: Part I—Reaction Pathways and Kinetics. 35
ROSA AZHARI, SAMUEL SIDEMAN & NOAH LOTAN (Israel)

Effect of Some 2-Arylbenzothiazoles on the Photo-degradation of Poly(vinyl chloride) 53
IVAN PETKOV, TODOR DELIGEORGIEV, PETER MARKOV, MICHAIL EVSTATIEV & STOJKO FAKIROV (Bulgaria)

Study of $CaCO_3$ Filled Polypropylene Composite with Long Use Life Time . 67
PAN JIANGQING, XU HONGMEI, QI JUYING, CEN JINFEN & MA ZHENMIN (People's Republic of China)

Photo-oxidation of Poly(vinyl chloride): Part 3—Influence of Photo-catalytic Pigments 77
JEAN-LUC GARDETTE & JACQUES LEMAIRE (France)

The Role of Hydroperoxides in the Photo-oxidation of Crosslinked Polymer Coatings 93
D. F. MIELEWSKI, D. R. BAUER & J. L. GERLOCK (USA)

Sensitizing Action of Two Types of β-Ketoesters on the Weathering of Hard Poly(vinyl chloride) 105
PENKA GENOVA-DIMITROVA & IVAN PETKOV (Bulgaria)

Benzophenone-Sensitized Photo-degradation of Polyolefins: Influence of Benzophenone on Model Compounds 115
HITOSHI KUBOTA, KAZUO TAKAHASHI & YOSHITAKA OGIWARA (Japan)

Announcement 125

Calendar of Events 126

Polymer Degradation and Stability **(33)** (1991)—© 1991 Elsevier Science Publishers Ltd, England. Printed in Great Britain

Polymer Degradation and Stability **33** (1991) 444–446

CONTENTS OF VOLUME 33

Number 1

The Effects of Temperature and Humidity on the Chemical Structure of Urea Formaldehyde Foam 1
V. M. BROWN, D. R. CRUMP & D. GARDINER (UK)

Photo-oxidation of Poly(vinyl chloride): Part 2—A Comparative Study of the Carbonylated Products in Photo-chemical and Thermal Oxidations . . . 17
S. GAUMET & J.-L. GARDETTE (France)

A Generalized Model for Enzymic Depolymerization Processes: Part I—Reaction Pathways and Kinetics. 35
ROSA AZHARI, SAMUEL SIDEMAN & NOAH LOTAN (Israel)

Effect of Some 2-Arylbenzothiazoles on the Photo-degradation of Poly(vinyl chloride) 53
IVAN PETKOV, TODOR DELIGEORGIEV, PETER MARKOV, MICHAIL EVSTATIEV & STOJKO FAKIROV (Bulgaria)

Study of $CaCO_3$ Filled Polypropylene Composite with Long Use Life Time . 67
PAN JIANGQING, XU HONGMEI, QI JUYING, CEN JINFEN & MA ZHENMIN (People's Republic of China)

Photo-oxidation of Poly(vinyl chloride): Part 3—Influence of Photo-catalytic Pigments 77
JEAN-LUC GARDETTE & JACQUES LEMAIRE (France)

The Role of Hydroperoxides in the Photo-oxidation of Crosslinked Polymer Coatings 93
D. F. MIELEWSKI, D. R. BAUER & J. L. GERLOCK (USA)

Sensitizing Action of Two Types of β-Ketoesters on the Weathering of Hard Poly(vinyl chloride) 105
PENKA GENOVA-DIMITROVA & IVAN PETKOV (Bulgaria)

Benzophenone-Sensitized Photo-degradation of Polyolefins: Influence of Benzophenone on Model Compounds 115
HITOSHI KUBOTA, KAZUO TAKAHASHI & YOSHITAKA OGIWARA (Japan)

Announcement 125

Calendar of Events 126

Polymer Degradation and Stability **(33)** (1991)—© 1991 Elsevier Science Publishers Ltd, England. Printed in Great Britain

Number 2

Special Issue
Thermal Stabilisation and Flammability of Polymers and Composites

Editorial 129

Overview of Fire Retardant Mechanisms 131
G. CAMINO, L. COSTA & M. P. LUDA DI CORTEMIGLIA (Italy)

Use of Gas Chromatographic Analysis of Volatile Products to Investigate the Mechanisms Underlying the Influence of Flame Retardants on the Pyrolysis of Cellulose in Air 155
A. A. FAROQ, D. PRICE, G. J. MILNES & A. R. HORROCKS (UK)

Free Radicals in the Gas Phase. ESR Investigation of Flame and Microwave Plasma of Atomized Gases. A Contribution to Flame Retardation and Polymer Erosion Mechanisms 171
A. TKÁČ (Czechoslovakia)

The Reaction of Wool with *N*-Hydroxymethyl Phosphonopropionamide . . 207
MICHAEL E. HALL & SANJIV SHAH (UK)

Characterization and Degradation Studies of Suspension-polymerized Poly(vinyl chloride): Part I: Thermal Degradation 213
ALFONSO J. CHIRINOS-PADRÓN &
GUSTAVO A. VON SCHOETTLER (Venezuela)

Evolution of Aromatics in the Thermal Degradation of Poly(vinyl chloride): A Mechanistic Study 229
GIORGIO MONTAUDO & CONCETTO PUGLISI (Italy)

Thermal Degradation of Blends of PVC with Poly(Tetramethylene Sebacate) . 263
I. C. McNEILL, J. G. GORMAN (UK) & S. BASAN (Turkey)

Low Temperature Thermo-oxidation of Thermoplastics in the Solid State . . 277
JACQUES LEMAIRE, RENÉ ARNAUD &
JEAN-LUC GARDETTE (France)

The Spontaneous Igniting Behaviour of Oil-contaminated Cotton 295
A. RICHARD HORROCKS, WENDY A. MOSS, NEIL C. EDWARDS & DENNIS PRICE (UK)

Action of Various Flame Retardant Combinations on the Flammabilty of Polypropylene 307
B. ČERIČ & E. ŠIMON (Yugoslavia)

Calendar of Events 325

Number 3

Degradation of Polyurethanes in Biomedical Applications—A Review . . 329
HANS J. GRIESSER (Australia)

An Investigation of Some Aspects of the Weathering of Plasticized PVC . . 355
PENKA GENOVA-DIMITROVA (Bulgaria)

Thermal Stability and Thermal Characteristics of PVC/*cis*-PBR Blends . . 367
MOHAMMAD KAZIM NAQVI & ARUP RATAN SEN (India)

Thermal Degradation of Polychloroprene Rubber 377
P. BUDRUGEAC & S. CIUTACU (Romania)

Principles of Increase of Stability of Polyacetylene. System Analysis, Experimental and Model 387
V. M. KOBRYANSKII (USSR)

Organosulfur Antioxidants: Mechanisms of Action 397
DONALD M. KULICH & J. REID SHELTON (USA)

Hydroperoxide Formation in the Early Stages of Polypropylene Photo-oxidation 411
GRAEME A. GEORGE & MOUSA GHAEMY (Australia)

Determination of Thermal Gelation Points of a Vinylidene Chloride/Acrylonitrile Copolymer by a Spectrophotometric Technique 429
SATILMIS BASAN (Turkey)

Calendar of Events 441